

### CONTAMINATION ASSESSMENT REPORT ADDENDUM

### U.S. NAVY OUTLYING LANDING FIELD (OLF) BRONSON SITE 1162 PENSACOLA, FLORIDA

#### PREPARED BY:

NAVY PUBLIC WORKS CENTER BUILDING 3887 PENSACOLA, FLORIDA 32508-6500

AUTHOR: GREGORY ALLEN CAMPBELL, P.E.

**APRIL 2, 1997** 

#### PREPARED FOR:

SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND

2155 EAGLE DR., P.O. BOX 190010 NORTH CHARLESTON, SOUTH CAROLINA 29418

BYAS GLOVER, CODE 18410, ENGINEER-IN-CHARGE



#### **DEPARTMENT OF THE NAVY**

NAVY PUBLIC WORKS CENTER 310 JOHN TOWER ROAD PENSACOLA, FLORIDA 32508-5303

IN REPLY REFER TO:

5090 Code 911.4 2 April 97

Mr. John Mitchell Remedial Project Manager Florida Department of Environmental Protection Twin Towers Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

RE: CONTAMINATION ASSESSMENT ADDENDUM, SITE 1162, BRONSON FIELD, PENSACOLA, FLORIDA (FDEP FACILITY NO. 179300938)

Dear Mr. Mitchell:

This letter is in reference to your January 16, 1997 letter addressing comments to the Contamination Assessment Report (CAR) dated December 1996 for the subject site. Per your request, this CAR addendum is prepared in response to your comments as summarized below:

COMMENT 1: Excessively contaminated soil exists at the location of soil boring B3 which is also near the location of monitoring well MW-1. Monitoring well MW-1 had an increase in benzene and total BTEX between the two sampling events. Based upon apparent groundwater flow direction, an additional shallow monitoring well should be placed at the north central edge of the concrete pad, and another shallow monitoring well approximately 15 - 20 feet southwest of MW-1. I also suggest a soil boring with OVA analysis be performed beneath the center of the concrete pad.

RESPONSE 1: Monitoring wells MW-7 and MW-8 were installed northeast and southwest of monitoring well MW-1 on February 18, 1997 as shown in revised Figure 2-3 (see attachment A). Monitoring well construction detail diagrams for monitoring wells MW-7 and MW-8 are also provided in Attachment A. Soil samples were collected during the installation of monitoring wells MW-7 and MW-8 at 1, 4, 7, 10, 16, 19 and 20 feet below land surface (bls) and analyzed for volatile organic vapors using an OVA. The results of the OVA screening are shown in the lithological logs provided in Attachment A. Groundwater samples were collected from monitoring wells MW-7 and MW-8 on February 26, 1997 and analyzed for VOAs, PAHs, TPH and EDB using EPA methods 8260, 8270, FLPRO and 504, respectively. No contaminants were detected in the groundwater samples collected from monitoring well MW-7 and MW-8. A copy of the laboratory analysis is provided in Attachment B. A soil boring with OVA analysis was not performed beneath the center of the concrete pad due to lack of access in this area due to old abandoned engine equipment presently mounted on the pad. Since OVA screening was performed during the installation of monitoring well MW-7; no volatile organic vapors were detected in the soil samples collected at monitoring well MW-7; and the location of MW-7 is in

#### PAGE 2 OF 2

RE: CONTAMINATION ASSESSMENT ADDENDUM, SITE 1162, BRONSON FIELD, PENSACOLA, FLORIDA (FDEP FACILITY NO. 179300938)

the vicinity of the center of the pad; it is our opinion that the installation of a soil boring at the center of the pad is not needed.

Based upon the findings of this contamination assessment addendum, it is requested that the recommendations outlined in the CAR of December 1997 be approved with the following changes:

- (1) Monitoring well MW-7 be considered the upgradient monitoring well instead of monitoring well MW-4.
- (2) Monitoring well MW-8 be considered the downgradient monitoring well instead of monitoring well MW-2.

If you have any questions concerning this CAR Addendum please contact Mr. Greg Campbell at (904) 452-3180.

Sincerely,

LT, CEC, USN
By direction of the

Commanding Officer

Enclosure: (2 copies)

(1) Contamination Assessment Report (CAR) Site 1162, U.S. Navy Outlying Field (OLF) Bronson, Pensacola, Florida

Copy to: SOUTHNAVFACENGCOM (Code 18410, Byes Glover) NAS Envir. Dept. (Dean Spencer, Code 00500)

#### CONTAMINATION ASSESSMENT REPORT ADDENDUM

### U.S. NAVY OUTLYING LANDING FIELD (OLF) BRONSON SITE 1162 PENSACOLA, FLORIDA

#### PREPARED BY:

### NAVY PUBLIC WORKS CENTER BUILDING 3887 PENSACOLA, FLORIDA 32508-6500

**AUTHOR: GREGORY ALLEN CAMPBELL, P.E.** 

**APRIL 2, 1997** 

#### PREPARED FOR:

SOUTHERN DIVISION NAVAL FACILITIES ENGINEERING COMMAND

2155 EAGLE DR., P.O. BOX 190010 NORTH CHARLESTON, SOUTH CAROLINA 29418

BYAS GLOVER, CODE 18410, ENGINEER-IN-CHARGE

#### PROFESSIONAL REVIEW CERTIFICATION

The Contamination Assessment Report Addendum contained in this report was prepared using sound, hydrogeologic principles and judgement. This assessment is based on the geologic investigation and associated information detailed in the text and appended to this report. If conditions are determined to exist that differ from those described, the undersigned engineer should be notified to evaluate the effects of any additional information on the assessment described in this report. This Contamination Assessment Report Addendum was developed for the gasoline fuel leak located at the former location of Building 1162, Bronson Field, Pensacola, Florida and should not be construed to apply to any other site.

Gregory Allen Campbell Professional Engineer

P.E. No. 38572

4/2/97

Date

Mr. John Mitchell Remedial Project Manager Florida Department of Environmental Protection Twin Towers Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

RE: CONTAMINATION ASSESSMENT ADDENDUM, SITE 1162, BRONSON FIELD, PENSACOLA, FLORIDA (FDEP FACILITY NO. 179300938)

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RESPONSE 1: Monitoring wells MW-7 and MW-8 were installed northeast and southwest of monitoring well MW-1 on February 18, 1997 as shown in revised Figure 2-3 (see attachment A). Monitoring well construction detail diagrams for monitoring wells MW-7 and MW-8 are also provided in Attachment A. Soil samples were collected during the installation of monitoring wells MW-7 and MW-8 at 1, 4, 7, 10, 16, 19 and 20 feet below land surface (bls) and analyzed for volatile organic vapors using an OVA. The results of the OVA screening are shown in the lithological logs provided in Attachment A. Groundwater samples were collected from monitoring wells MW-7 and MW-8 on February 26, 1997 and analyzed for VOAs, PAHs, TPH and EDB using EPA methods 8260, 8270, FLPRO and 504, respectively. No contaminants were detected in the groundwater samples collected from monitoring well MW-7 and MW-8. A copy of the laboratory analysis is provided in Attachment B. A soil boring with OVA analysis was not performed beneath the center of the concrete pad due to lack of access in this area due to old abandoned engine equipment presently mounted on the pad. Since OVA screening was performed during the installation of monitoring well MW-7; no volatile organic vapors were detected in the soil samples collected at monitoring well MW-7; and the location of MW-7 is in the vicinity of the center of the pad; it is our opinion that the installation of a soil boring at the center of the pad is not needed.

Based upon the findings of this contamination assessment addendum, it is requested that the recommendations outlined in the CAR of December 1997 be approved with the following changes:

- (1) Monitoring well MW-7 be considered the upgradient monitoring well instead of monitoring well MW-4.
- (2) Monitoring well MW-8 be considered the downgradient monitoring well instead of monitoring well MW-2.

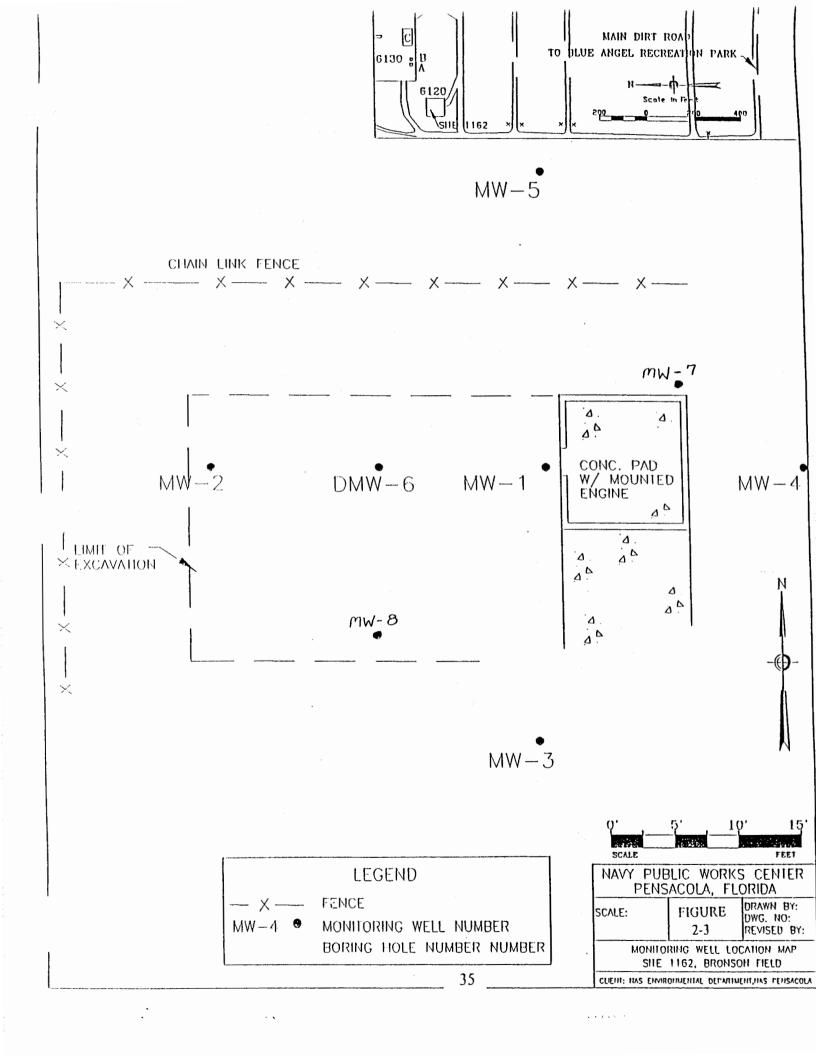
If you have any questions concerning this CAR Addendum please contact Mr. Greg Campbell at (904) 452-3180.

Sincerely,

Frank Stuart

### ATTACHMENT A

- (1) Revised Figure 2-3
   (2) Monitor Well Construction Details (MW-7, MW-8)
   (3) Lithological Logs (MW-7, MW-8)





# MONITOR WELL CONSTRUCTION DETAIL

6389 Tower Lanc Sarasota, FL 34240-8810 (941) 371-7617 (941) 378-5218 Fax

NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

CAD FILE @STA3> C:\ACADR13\MW-DETL1.DWG

LOGGED BY: Patrick J. Brown DRILLING CONTRACTOR: S. FL Test & DRILLER'S NAME: Craig Griffey WELL NUMBER: MW-7  COMMENTS: (Lost circulation interval, Water Street, West Street	CLIENT: NPWC, ROICC, NAS Pensacola, FL  Dr. LOCATION: Site 1162, Bronson Field  JOB NUMBER: N65114-95-D-2126  DATE Start: 02/18/97 Finish: 02/18/97  TIME Start: 1300 Finish: 1400  ater level changes, Hole collapse interval, etc.):
Vault Type: Steel 0.1' al	8"
6" thk. Concrete Encasement— (4,000 psi)	3/4" Existing Surface
Locking Cap 0.2'	0.2' Top of Well Casing
Bottom of Manhole Casing 0.3'  Top of Seal: 16'	Type of Grout: Neat Cement
Bottom of Seal: 17'	Type of Seal: <u>Wyoming Bentonite</u>
Top of Screen: 18'	
Ground Water: <u>21'</u>	Well Casing Type: Sch. 40 PVC Diameter: 2"  Sand Pack Type: 20/30 Silica
	Screen Type: Sch. 40 PVC  Diameter: 2"  Slot Size: 0.01"  Length: 10'
Bottom of Screen: 28'  Total Depth of Bore Hole: 28.5'	

STA3-19951128.1143

DRAWING ABOVE IS NOT TO SCALE



# MONITOR WELL CONSTRUCTION DETAIL

6389 Tower Lane Sarasota, FL 34240-8810 (941) 371-7617 (941) 378-5218 Fax

NOTE: DEPTHS SHOWN ARE BELOW LAND SURFACE (B.L.S.)

CAD FILE @STA3> C:\ACADR13\MW-DETL1.DWG

LOGGED BY: Patrick J. Brown DRILLING CONTRACTOR: S. FL Test & Dr. DRILLER'S NAME: Craig Griffey WELL NUMBER: MW-8	CLIENT: NPWC, ROICC, NAS Pensacola, FL LOCATION: Site 1162, Bronson Field JOB NUMBER: N65114-95-D-2126  DATE Start: 02/18/97 Finish: 02/18/97  TIME Start: 1415 Finish: 1515
COMMENTS: (Lost circulation interval, Water le	evel changes, llole collapse interval, etc.):
Vault Type: Steel 0.1' als	8"
6" thk. Concrete Encasement (4,000 psi)	3/4" Existing Surface
1	
Locking Cap 0.2'	Top of Well Casing
Bottom of Manhole Casing $0.3$	Type of Grout: <u>Neat Cement</u>
Top of Seal: 16'	Type of Seal: <b>Wyoming Bentonite</b>
Bottom of Seal: 17'	
Top of Screen: 18'	
	Well Casing Type: Sch 40 PVC
	Well Casing Type: Sch. 40 PVC Diameter: 2"
Ground Water: 21'	Sand Pack Type: 20/30 Silica
	Screen Type: Sah 40 PVC
	Screen Type: Sch. 40 PVC Diameter: 2" Slot Size: 0.01"
	Slot Size: 0.01 Length: 10'
. ———•	Bore Hole Diameter: 8-1/4"
Bottom of Screen: 28'	
Total Depth of Bore Hole: 28.5'	

STA3--19951128.1143

DRAWING ABOVE IS NOT TO SCALE

Bronson Field Contractor: W.E.S., Inc. Dr. Method: HSA  Pensacola, Florida Driller: South Florida Testing & Drilling Dr. Rig: Mobile B61HD  MONITORING WELL NO.: MW-7 Start Date: 02/18/97 Completed: 02/18	Site	1162					LOGGED BY	Y·	Patrick J. Brown	<del> </del>	SHEET	1 OF 1	
Pensacola, Florida   MONITORING WELL NO.: MW-7   Start Date: 02/18/97   Completed: 02/18/97   Completed: 02/18/97   Completed: 02/18/97   Start Time: 1300   Finish Time: 1													HSA
MONITORING WELL NO.: MW-7   Start Date: 02/18/97   Completed: 02/18   Oz/18   Start Time: 1300   Finish Time: 1	ì			orida						n			
Start Time: 1300   Finish Time: 1   1	1				MW-7					9		ed:	
Delivery Order 0048													1400
T N   B   SAMP   SAMP   NTV   DEPTH   DESCRIPTION OF MATERIALS AND   CARBON   FILTER   NOTES   (PPM)   CARBON   TRUE   CARBON   CARBON   FILTER   NOTES   CARBON   CARBON   CA	Delis	ary (	Orde	- 0048							1		
Y					SAMP.	I	Contract No	1405114-50	J-D-2120				
E   B   W	Υ				ì		DESCRIPTION OF MATERIALS AND						
P				(FT.)	(IN)	DEDT!		C	ONDITIONS				
100%   2		B	<u>w</u> _		<u> </u>	DEPTH	<del></del>	O. 41 T	A4 Co			T	NET
S T	1				4000/	_	1			ın		1	
T	1				100%	2		numus/org	janics		"	INK	O
D	1				100%	4		1' - 4'; Tar	n, Medium, Silty sar	nd	0	NR	О
D	  H					6					0	NR	
L E 100% 10 7-10'; Beige, Medium, Silty sand 0 NR 0  H 12 100% 10 10-13'; Light Beige, Silty, Medium 0 NR 0  A 14 to Fine Sand 0 NR 0  H A 18 100% 16 13-16'; Light Beige, Silty, Medium to fine sand 18 100% 18 16-19'; Lt. Beige, Silty, Med. to Fine Sand 0 NR 0  Water Table @ 21' BLS 22 20-25'; White, Silty, Medium to Fine Sand 24 25-28'; White, Clayey Sand 26 28 End of Boring @ 28' BLS					100%		·	4' - 7':Tan	. Medium. Siltv sar	nd			
E 100% 10 7-10'; Beige, Medium, Silty sand 0 NR 0  H 12 10-13'; Light Beige, Silty, Medium 0 NR 0  H 100% 16 13-16'; Light Beige, Silty, Medium to fine sand 18 100% 20 16-19'; Lt. Beige, Silty, Med. to Fine Sand 0 NR 0  Water Table @ 21' BLS 20-25'; White, Silty, Medium to Fine Sand 24 25-28'; White, Clayey Sand 26 28 End of Boring @ 28' BLS	1.					8			,,,,	-			
H 100% 10 7-10'; Beige, Medium, Silty sand 0 NR 0 12 10-13'; Light Beige, Silty, Medium to Fine Sand 100% 16 13-16'; Light Beige, Silty, Medium to fine sand 18 100% 16 16-19'; Lt. Beige, Silty, Med. to Fine Sand 0 NR 0 19-20'; Clayey, Tan, Silty, Med., Fine Sand 0 NR 0 Water Table @ 21' BLS 22 20-25'; White, Silty, Medium to Fine Sand 26 28 End of Boring @ 28' BLS	ı					_						}	
S   100%   10-13'; Light Beige, Silty, Medium   0 NR   0 NR   14					100%	10		7-10'; Beig	ge, Medium, Silty sa	and	C	NR	О
S   100%   10-13'; Light Beige, Silty, Medium   0 NR   0 NR   14	Н					12	!						
H A 100% 16 13-16'; Light Beige, Silty, Medium to fine sand	s				100%			10-13'; Lig	jht Beige, Silty, <mark>M</mark> ed	dium		NR	o
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A 18 100% 16-19';Lt. Beige,Silty, Med. to Fine Sand 0 NR 0 19-20'; Clayey, Tan,Silty,Med., Fine Sand 0 NR 0 Water Table @ 21' BLS 20-25'; White, Silty, Medium to Fine Sand 24 25-28'; White,Clayey Sand 26 28 End of Boring @ 28' BLS		}			100%	16		13-16'; Lig	jht Beige, Silty, <b>Me</b>	dium to		NR	0
100% 20 19-20'; Clayey, Tan, Silty, Med. to Fine Sand 0 NR 0 Water Table @ 21' BLS 20-25'; White, Silty, Medium to Fine Sand 24 25-28'; White, Clayey Sand 28 End of Boring @ 28' BLS	Н							fine sand					
100%   20	Α					18	·					}	
Water Table @ 21' BLS  22 20-25'; White, Silty, Medium to Fine Sand  24 25-28'; White, Clayey Sand  26 28 End of Boring @ 28' BLS					il .			16-19';Lt.	Beige, Silty, Med. to	Fine Sand	1		0
22 20-25'; White, Silty, Medium to Fine Sand  24 25-28'; White, Clayey Sand  26  28 End of Boring @ 28' BLS							<u> </u>	19-20'; Cl	ayey, Tan,Silty,Med	I., Fine Sand	0	NR	0
24				Wate	r Table @ 2	1							
25-28'; White,Clayey Sand 26  28 End of Boring @ 28' BLS			:		}	22	<u></u>	20-25'; W	hite, Silty, Medium	to Fine Sand			
25-28'; White,Clayey Sand 26  28 End of Boring @ 28' BLS						24							
26								25-28'; W	hite,Clayey Sand		1	1	1
				1		26	s	•	• •				
30						28	3	End of Bo	ring @ 28' BLS				
						30	<u>'</u>						

I certify that this lithologic log, including geologic and hydrogeologic interpretations, has been prepared under my direct supervision and meets the minimal technical requirements as set forth in Chapter 492 of the Florida Statutes.

Prepared by:

Site	1162					LOGGED BY: Patrick J. Brown SHEET	1 OF 1	
ŀ	nson l						Dr. Method: HSA	
Pen	sacol	a. Flo	orida			Driller: South Florida Testing & Drilling Dr. Rig:		Mobile B61HDX
1			WELL NO.:	: MW-8		Start Date: 02/18/97 Comple		02/18/97
						Start Time: 1415 Finish T	ime:	1515
Deli	v <b>егу</b> (	Order	0048			Contract No N65114-95-D-2126 CC	NTAMIN	IATION DATA
T Y P E	U M	L	INTV.	SAMP. RECV. (IN)	DEPTH	DESCRIPTION OF MATERIALS AND (PI CONDITIONS CAP	ESULTS PM) RBON TER	NOTES
P	<u> </u>	VV			DEFIR		WITH	NET
0				100%	2	Sand 0	NR	o
S T				100%	4	1' - 4'; Brown, Medium, Silty Sand	NR	0
Н О L				100%	6	4' - 7';Tan /Brown, Medium, Silty Sand	NR	0
E				100%	10	7-10'; Tan/Beige Medium, Silty Sand	NR	О
H S A				100%	12 14	 10-13'; Beige, Medium, Silty Sand 	NR	o
н				100%	16	13-16'; White/Beige, Medium, Silty Sand	NR	o
A			Wate	100% 100% er Table @ 2	18 20 1' BLS 22	19-20'; Clayey, Tan, Silty, Medium to Fine Sand	NR NR	0
					24	20-25'; White, Medium to Fine Sand  25-28'; White, Clayey Sand		
					30	End of Boring @ 28' BLS		

I certify that this lithologic log, including geologic and hydrogeologic interpretations, has been prepared under my direct supervision and meets the minimal technical requirements as set forth in Chapter 492 of the Florida Statutes.

Prepared by:

Michael J. Walsh P.G.L.

Florida Professional Geologist No. 000 181

STADBONE TO THE STADBONE

### ATTACHMENT B

(1) Laboratory Analytical Results

## **Environmental Laboratory**

Bldg. 3887, Code 920

DSN 922-4728/3642

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642

Client:

NPWC Environmental

**Analytical Report** 

Lab Report Number:

Sample Date:

Sample Site:

Received Date:

Job Order No.:

601/602 Volatiles by Method 8260

70059

02/26/97

02/27/97

130 5002

NAS Pensacola, FL

Address: Bldg. 3887, Code 910

NAS Pensacola,FL 32508

Phone #:

452-3180 Greg Campbell

D3N 922-4120/3042	FIIOHE #. 402-5100		
	Contact: Greg Campbell		
LAB Sample ID#	<sub>1-</sub> 70859		
Sample Name / Location	BF-1162		
	Eq. Blank		
Collector's Name	PJB		
Date & Time Collected	02/26/97 @ 1500		
Sample Type (composite or grab)	Grab		
Analyst	J. Moore		
Date of Extraction / Initials	02/27/97 JM		
Date of Analysis	02/27/97		
Sample Matrix	GW GW		
Dilution			
Compound	1- 70859 units Limit Flac		
Name		95	
Benzene	BDL ug/L 1		
Bromodichloromethane	BDL ug/L 1		
Bromoform	BDL ug/L 2		
Bromomethane	BDL ug/L 3		
Carbon Tetrachloride	BDL ug/L 1		
Chlorobenzene	BDL ug/L 1		
Chloroethane	BDL ug/L 1		
2-Chloroethylvinyl ether	BDL ug/L 1		
Chloroform	BDL ug/L 1		
Chloromethane	BDL ug/L 1		
Dibromochloromethane	BDL ug/L 1		
1,2-Dichlorobenzene	BDL ug/L 1		
1,3-Dichlorobenzene	BDL ug/L 1		
1,4-Dichlorobenzene	BDL ug/L 1		
Dichlorodifluoromethane	BDL ug/L 1		
1,1-Dichloroethane	BDL ug/L 1		
1,2-Dichloroethane	BDL ug/L 1		
1,1-Dichloroethene	BDL ug/L 1		
trans-1,2-Dichloroethene	BDL ug/L 1		
1,2-Dichloropropane	BDL ug/L 1		
cis-1,3-Dichloropropene	BDL ug/L 1		
trans-1,3-Dichloropropene	BDL ug/L 1		
Ethylbenzene	BDL ug/L 1		
Methylene Chloride	BDL ug/L 1		
Methyl-tert-butyl ether (MTBE) *	BDL ug/l 1		
1,1,2,2-Tetrachloroethane	BDL ug/L 1		
Tetrachloroethene	BDL ug/L 1		
Toluen <b>e</b>	BDL ug/L 1		
1,1,1-Trichloroethane	BDL ug/L 1		
1,1,2-Trichloroethane	BDL ug/L 1		
Trichloroethene	BDL ug/L 1		
Trichlorofluoromethane	BDL ug/L 1		
Vinyl Chloride	BDL ug/L 1		
Xylenes (Total)	BDL ug/L 1		

#### SURROGATE SPIKE RECOVERIES

Acceptance							
	Limits	Percent Recovery					
1,2-Dichloroethane-d4	75-133	103					
Toluene-d8	86-119	100					
Bromofluorobenzene	85-116	102					

COMMENTS :		
BDL = Below Detection Limit.	ug/L = mjcrogram per Liter, ug/Kg = mlcrogram per Kilogram.	• = FL HRS certification panding.
Approved by :	Jerry Does, Laboratory Director	Date: 3/12/97 Report Generated

Page 1 of 1

Report Generated End of Report

## **Environmental Laboratory**

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642

DSN 922-4728/3642

Client: Address:

NPWC Environmental

Bldg. 3887, Code 910 NAS Pensacola,FL 32508

Phone #: 452-3180

Greg Campbell

Contact:

	- COINA	<u>~</u> _	ampoen	
LAB Sample ID#	1- 708	159		
Sample Name / Location	BF-1162	?	•	
	Eq. Blan	k		
Collector's Name	PJB			
Date & Time Collected	02/26/9	@ 1500		
Sample Type (composite or grab)	Grab			
Analyst	M. Char	nbers		
Date of Extraction / Initials	02/28/9	7 JJ	<del></del>	
Date of Analysis	03/01/9	7		
Sample Matrix	GW			
Dilution		X	1	1
Compound		<u> </u>	Det.	
Name	1- 7	0859 units	Limit	Flags
Acenaphthene	BDL	ug/L	2	
Aconaphthylene	BDL	ug/L	2	
Anthracene	BDL	ug/L	2	
Benzo(a)anthracene	BDL	ug/L	2	1
Benzo(a)pyrene	BDL	ug/L	2	
Benzo(b)fluoranthene	BDL.	ug/L	2	
Benzo(g,h,i)perylene	BDL	ug/L	2	
Benzo(k)fluoranthene	BDL	ug/L	3	
Chrysene	BDL	ug/L	2	
Dibenz(a,h)anthracene	BDL	ug/L	2	
Fluoranthene	BDL	ug/L	2	
Fluorene	BDL	ug/L	2	
Indeno(1,2,3-cd)pyrene	BDI.	ug/L	2	
1-Methylnaphthalene *	BDL	ug/L	2	
2-Methylnaphthalene	BDL	ug/L	3	
Naphthalene	BDL	ug/l.	2	
Phenanthrene	BDL	ug/L	2	
Pyrene	BDL.	ug/l.	2	

#### SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery	
Nitrobenzene- d5	35-114	78	
2-Fluorobiphenyl	43-116	86	
Terphenyl -d14	33-141	101	

COMMENTS :		
BDL = Below Detection Limit.	ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.	• = FL HRS certification pending.
Approved by :	Jenry Does, Uniforatory Director	Date: 3/12/97 Report Generated

#### 610 PAH's by Method 8270

Lab Report Number:

Sample Date:

02/26/97 02/27/97

Received Date: Sample Site: Job Order No.:

NAS Pensacola, FL

130 5002

### **Environmental Laboratory**

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Client: Address: **NPWC Environmental** 

Bldg. 3887, Code 910

Phone (904) 452-4728/3642 DSN 922-4728/3642

NAS Pensacola,FL 32508 452-3180 Phone #:

Contact:

Greg Campbell

LAB Sample ID#	1- 70859						
Sample Name / Location	BF-1162						
		Eq. Blank					
Collector's Name	РЈВ						
Date & Time Collected	02/26/97 @ 1500						
Sample Type (composite or grab)	Grab						
Analyst	M. Chambers						
Date of Extraction / Initials	].	03/04/97 MC					
Date of Analysis		03/04/97					
Sample Matrix		GW					
Dilution	X 1						
Compound	Det.						
Name	1-	70859	units	Limit	Flags		
Ethylene Dibromide	BDL ug/L 0.02						

#### SURROGATE SPIKE RECOVERIES

	Acceptance		
	Limits	Percent Recovery	
Tetra-Chioro-m-Xylene	54-140	104	

COMMENTS :			•	
BDL = Below Detec	tlon Limit.	ug/L = microgram per Lller. ug/Kg = microgram per Kllogram.		

ug/L = microgram per Liter. ug/Kg = microgram per Kilogram.

Approved by :

Jerry Dees, Laboratory Director

Analytical Report

Lab Report Number:

Sample Date:

Sample Site:

Received Date:

Job Order No.:

Ethylene Dibromide by Method 504

70859

NAS Pensacola, FL

02/26/97

02/27/97

130 5002

3/12/97

Report Generaled

### **Environmental Laboratory**

Bldg. 3887, Code 920

DSN 922-4728/3642

COMMENTS:

NAS Pensacola, FL 32508 - 6500 Phone (904) 452-4728/3642

Client:

**NPWC Environmental** Address: Bldg. 3887, Code 910

NAS Pensacola,FL 32508

Phone #: 452-3180 Contact:

Greg Campbell

## **Analytical Report**

### Petroleum Range Organics by FLPRO

Lab Report Number:

Sample Date:

02/26/97 02/27/97

Received Date: Sample Site:

NAS Pensacola, FL

Job Order No.:

130 5002

			2.09 0	Citipocii	
LAB Sample ID#	1-	7085	9		
Sample Name / Location		BF-1162			
		Eq. Blank			
Collector's Name		PJB			-
Date & Time Collected		02/26/97 @ 150	00	-	
Sample Type (composite or grab) Gr		Grab			
Analyst	J. Moore				
Date of extraction / initials	03/06/97 JJ				
Date of Analysis	03/08/97				
Sample Matrix	GW				
Dilution			×	1	
				Det.	T
Parameter	1-	70859	units	Limit	Flags
Petroleum Range Organics by FLPRO		BDL	nıg/L	0.25	

#### SURROGATE SPIKE RECOVERIES

	Acceptance	
	Limits	Percent Recovery
ortho-Terphenyl	82-142 *	87
Nonatriacontane (C-39)	42-193 *	103

		<u> </u>
BDL = Below Detection Limit.	mg/L = millgram per Liter. mg/Kg = milligram per Kilogram.	
Approved by :	Jerry Dees Laboratory Director	Date:3/12/97

\* = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

### **Environmental Laboratory**

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642 DSN 922-4728/3642

1,3-Dichlorobenzene

1,4-Dichlorobenzene

1,1-Dichloroethane

1,2-Dichloroethane

1,1-Dichloroethene

1,2-Dichloropropane

Methylene Chloride

Tetrachloroethene

1,1,1-Trichloroethane

1,1,2-Trichloroethane

Trichlorofluoromethane

Trichloroethene

Vinyl Chloride

Xylenes (Total)

Toluene

Ethylbenzene

Dichlorodithioromethane

trans-1,2-Dichloroethene

cis-1,3-Dichloropropene

trans-1,3-Dichloropropene

1,1,2,2-Tetrachloroethane

Methyl-tert-butyl ether (MTBE) \*

Client:

NPWC Environmental Address: Bldg. 3887, Code 910

NAS Pensacola FL 32508

Phone #: 452-3180

ug/L

ug/1

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

ug/L

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

1

D311 322-47 20/3042	FIIONE #. 432-3100	
	Contact: Greg Campbell	
LAB Sample ID#	1- 70860	
Sample Name / Location	BF-1162	
	MW-7	
Collector's Name	РЈВ	
Date & Time Collected	02/26/97 @ 1530	
Sample Type (composite or grab)	Grab	
Analyst	J. Moore	
Date of Extraction / Initials	02/27/97 JM	
Date of Analysis	02/27/97	
Sample Matrix	GW	
Dilution	X 1	
Compound	Det.	
Name	1- 70860 units Limit Fi	ags
Benzene	BDI. ug/L 1	•
Bromodichloromethane	BDL. ug/L 1	
Bromoform	BDL. ug/L 2	
Bromomethane	BDL ug/L 3	
Carbon Tetrachloride	BDL ug/L 1	
Chlorobenzene	BDL ug/L 1	
Chloroethane	BDL ug/L 1	
2-Chloroethylvinyt ether	BDL ug/L 1	
Chloroform	BDL ug/L 1	
Chloromethane	BDL ug/L 1	
Dibromochloromethane	BDL ug/L 1	
1,2-Dichlorobenzene	BOL ug/L 1	

BDL.

BDL

BDL

BDL

BDL

BDI.

BDL

BOL

BDL

#### SURROGATE SPIKE RECOVERIES

	Acceptance		
	Limits	Percent Recovery	
1,2-Dichloroethane-d4	75-133	104	
Toluene-d8	86-119	101	
Bromofluorobenzene	85-116	102	

COMMENTS :		
BDL = Below Detection Limit	it. ug/L = mlcrogram per Liter. ug/Kg = mlcrogram per Kilogram.	• = FL HRS certification pending.
Approved by :	Jény Dees, Laboratory Director	Date: 3/12/97  Report Generated

Page 1 of 1

End of Report

### **Analytical Report**

#### 601/602 Volatiles by Method 8260

Lab Report Number:

Sample Date:

02/26/97

Received Date: Sample Site:

02/27/97

Job Order No.:

NAS Pensacola, FL 130 5002

## **Environmental Laboratory**

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642

DSN 922-4728/3642

Client:

**NPWC Environmental** Address: Bldg. 3887, Code 910

NAS Pensacola, FL 32508

Phone #: 452-3180 Contact:

Greg Campbell

LAB Sample ID#	1-	70860			
Sample Name / Location		BF-1162	-		
·		MW-7			
Collector's Name		PJB			
Date & Time Collected		02/26/97 @ 153	10		
Sample Type (composite or grab)		Grab			,
Analyst		M. Chambers			
Date of Extraction / Initials		02/28/97 JJ			
Date of Analysis		03/01/97			
Sample Matrix	L	GW			
Dilution			X		
Compound				Det.	
Name	1-	70860	units	Limit	Flags
Acenaphthene	BDL		ug/L	2	
Acenaphthylene	BDL		ug/L	2	
Anthracene	BDL		ug/L	2	
Benzo(a)anthracene	BDL		ug/L	2	
Benzo(a)pyrene	BDL		ug/L	2	
Benzo(b)fluoranthene	BDL		ug/L	2	1
Benzo(g,h,i)perylene	BDL		ug/L	2	
Benzo(k)fluoranthene	BDL		ug/L	3	1
Chrysene	BDL		ug/L	2	1
Dibenz(a,h)anthracene	BDL		ug/L	2	1
Fluoranthene	BDI.		ug/L	2	
Fluorene	BDI,		ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL		ug/L	2	
1-Methylnaphthalene *	BDL		ug/L	2	
2-Methylnaphthalene	BDL		ug/L	3	
Naphthalene	BDL		ug/L	2	
Phenanthreno	BDL		ug/L	2	
Pyrene	BDL		ug/L	2	

#### SURROGATE SPIKE RECOVERIES

7	Acceptance		
	Limits	Percent Recovery	
Nitrobenzene- d5	35-114	75	
2-Fluorobiphenyl	43-116	85	
Terphenyl -d14	33-141	109	

COMMENTS:		
BDL = Below Detection Limit.	ug/L = microgram per Liter, ug/Kg = inicrogram per Kilogram.	* = FL HRS certification pending.
Approved by :	(m) (m)	Date: 3/12/97
	Jerry Dees, Laboratory Director	Report Generaled

#### 610 PAH's by Method 8270

Lab Report Number:

Sample Date:

02/26/97 02/27/97

Received Date: Sample Site: Job Order No.:

NAS Pensacola, FL 130 5002

### Environmental Laboratory

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Client:

NPWC Environmental

Address: Bldg. 3887, Code 910 NAS Pensacola,FL 32508

Phone (904) 452-4728/3642 DSN 922-4728/3642

Phone #: Contact: 452-3180

Greg Campbell

			3 -	ampoon	
LAB Sample ID#	1-	70860			
Sample Name / Location		BF-1162			
	1	MW-7			
Collector's Name		PJB			
Date & Time Collected		02/26/97 @ 153	30		
Sample Type (composite or grab)	Grab				
Analyst	M. Chambers				
Date of Extraction / Initials	03/04/97 MC				
Date of Analysis	of Analysis 03/04/97				
Sample Matrix	GW				
Dilution			Х		1
Compound				Det.	T
Name	1-	70860	units	Limit	Flags
Ethylene Dibromide		BDL	ug/L	0.02	

#### SURROGATE SPIKE RECOVERIES

OUTHOUTHE OTHER TREOTENES					
	Acceptance				
	Limits	Percent Recovery			
Tetra-Chloro-m-Xylene	54-140	96			

COMMENTS :				·		
BDI - Balow Data	stion Limit	ug/l " misrogram per l it	or ualka = misroaram	ner Kilogram	 ,,	

Approved by:

Jerry Dees, Laboratory Director

**Analytical Report** 

Lab Report Number:

Sample Date:

Sample Site:

Received Date:

Job Order No.:

Ethylene Dibromide by Method 504

70860

02/26/97

02/27/97

130 5002

NAS Pensacola, FL

3/12/97

Report Generated

### **Environmental Laboratory**

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642 JSN 922-4728/3642

COMMENTS :

Client: Address:

NPWC Environmental

Bldg. 3887, Code 910

NAS Pensacola,FL 32508

Phone #:

452-3180

Lab Report Number: Sample Date:

70860

Received Date:

**Analytical Report** 

02/26/97 02/27/97

Sample Site:

NAS Pensacola, FL

Job Order No.: 130 5002

Petroleum Range Organics by FLPRO

		Contact:	Greg C	ampbell	
LAB Sample ID#	1-	7086	0		
Sample Name / Location	1"	BF-1162			
	i	MW-7			
Collector's Name		PJB			
Date & Time Collected 02/26/97 @ 1530		90			
Sample Type (composite or grab)	Grab				
Analyst		J. Moore			
Date of extraction / Initials		03/06/97 JJ			
Date of Analysis		03/08/97.			
Sample Matrix		GW			
Dilution			×	1	
				Det.	T
Parameter	1-	70860	units	Limit	Flags
Petroleum Range Organics by FLPRO		BDL	nıg/L	0.25	

#### SURROGATE SPIKE RECOVERIES

CONTROCTE OF THE TREGOTERINE							
	Acceptance						
	Limits	Percent Recovery					
ortho-Terphenyl	82-142 *	91					
Nonatriacontane (C-39)	42-193 *	. 140					

BDL = Below Detection Limit.	mg/L = millgram per Liter. mg/Kg = milligram per Kilogram.	
Approved by :	Jerry Dees, Laboratory Director	Date: 3/12/97

\* = Suggested surrogate recovery limits listed in the method. In-house laboratory limits are in the process of being determined.

## Environmental Laboratory

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642 DSN 922-4728/3642

Client: Address:

NPWC Environmental Bldg. 3887, Code 910

NAS Pensacola, FL 32508

452-3180 Phone #: Contact:

Greg Campbell

LAB Sample ID#	1- 7086		<u>-</u>		
Sample Name / Location	BF-1162		-		
Sample Name / Location	MW-8				
Collector's Name	PJB				
		3 1660			
Date & Time Collected	02/26/97 @ Grab	g 1550			
Sample Type (composite or grab)	J. Moore				
Analyst					
Date of Extraction / Initials	02/27/97				
Date of Analysis	02/27/97				
Sample Matrix	GW				
Dilution		X		<u> </u>	
Compound			Det.	1	
Name		861 units	Limit	Flags	
Benzene	BDL	ug/L	1		
Bromodichloromethane	BDL	ug/L	1		
Bromoform	BDL.	ug/L	2		
Bromomelhane	BDL	ug/L	3		
Carbon Tetrachloride	BDL	ug/L	1		
Chlorobenzene	BDL	ug/L	1		
Chloroethane	BDL	ug/L	11		
2-Chloroethylvinyl ether	BDL	ug/L	1	1	
Chloroform	BDL	ug/L	1		
Chloromethane	BDL	ug/L	1		
Dibromochloromethane	BDL	ug/L	1		
1,2-Dichlorobenzene	BDL	ug/L	1		
1,3-Dichlorobenzene	BDL	ug/L	1	1	
1,4-Dichlorobenzene	BDL	ug/L	1	1	
Dichlorodifluoromethane	BDL	ug/L	1		
1,1-Dichloroethane	BDL	ug/L	1		
1,2-Dichloroethane	BDL	ug/L	1		
1,1-Dichloroethene	BDL	ug/L	1		
trans-1,2-Dichloroethene	BDL	ug/L	1		
1,2-Dichloropropane	BDL	ug/L	1		
cis-1,3-Dichloropropene	BDL	ug/L	1		
trans-1,3-Dichloropropene	BDL	ug/L	1	_	
Ethylbenzene	BDL	ug/L	1		
Methylene Chloride	BDL	ug/L	1		
Methyl-tert-butyl ether (MTBE) *	BDL	ug/l	1		
1,1,2,2-Tetrachloroethane	BDL	ug/L	1		
Tetrachloroethene	BDL	ug/L	1		
Toluene	BDL	ug/L	1		
1,1,1-Trichloroethane	8DL	ug/L	1		
1,1,2-Trichloroethane	BDL	ug/L	1		
Trichloroethene	BDL	ug/L	1		
Trichlorolluoromethane	BDL	ug/L	1		
Vinyl Chloride	BDL	ug/L	1		
Xylenes (Total)	BDL	ug/L	1		

#### SURROGATE SPIKE RECOVERIES

	Acceptance		
	Limits	Percent Recovery	
1,2-Dichloroethane-d4	75-133	102	
Toluene-d8	86-119	101	
Bromofluorobenzene	85-116	101	

BDL = Below Detection Limit.	ug/L = mlcrogram per Liler. ug/Kg = microgram per Kilogram.	• = FL HRS certifi	cation	pending.
Approved by :	(my Vin	_	Date:	3/12/97
	Jerry Dees, Laboratory Director			Report Generated
		Page 1 of 1		End of Report

### **Analytical Report**

### 601/602 Volatiles by Method 8260

Lab Report Number:

70861 02/26/97

Sample Date:

Received Date: Sample Site:

02/27/97 NAS Pensacola, FL

Job Order No.:

130 5002

## **Environmental Laboratory**

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642

)SN 922-4728/3642

Client:

NPWC Environmental Address: Bidg. 3887, Code 910

NAS Pensacola,FL 32508

Phone #: 452-3180

Contact: Greg Campbell

		Contact.	Olog C	ampuen	
LAB Sample ID#	1-	70861			
Sample Name / Location		BF-1162			
		MW-B			
Collector's Name		PJB			
Date & Time Collected		02/26/97 @ 155	50		
Sample Type (composite or grab)		Grab			
Analyst		M. Chambers			
Date of Extraction / Initials		02/28/97 JJ			
Date of Analysis		03/01/97			
Sample Matrix		GW			
Dilution			×	1	
Compound				Det.	
Name	1-	70861	units	Llmit	Flags
Acenaphthene	BDL		ug/L	2	
Acenaphthylene	BDL		ug/L	2	
Anthracene	BDL		ug/L	2	
Benzo(a)anthracene	BDL		ug/L	2	
Benzo(a)pyrene	BDL		ug/L	2	
Benzo(b)fluoranthene	BDL		ug/L	2	
Benzo(g,h,i)perytene	BDL		ug/L	2	
Benzo(k)fluoranthene	BDL		ug/L	3	
Chrysene	BDL		ug/L	2	
Dibenz(a,h)anthracene	BDL		ug/L	2	
Fluoranthene	BDL		ug/L	2	
Fluorene	BDL		ug/L	2	
Indeno(1,2,3-cd)pyrene	BDL		ug/L	2	
1-Methylnaphthalene *	BDL		ug/L	2	
2-Methylnaphthalene	BDL		ug/L	3	
Naphthalene	BDL		ug/L.	2	
Phenanthrene	BDL		ug/L	2	
Pyrene	BDL		ug/L	2	

### SURROGATE SPIKE RECOVERIES

	Acceptance Limits	Percent Recovery	
Nitrobenzene- d5	35-114	75	
2-Fluoroblphenyl	43-116	90	
Terphenyl -d14	33-141	107	

COMMENTS :		
BDL = Below Detection Limit.	ug/L = microgram per Liter. ug/Kg ≃ microgram per Kilogram.	• = FL HRS certification pending.
Approved by :	(Jerry Does, Laboratory Director	Date: 3/12/97 Report Generated

### 610 PAH's by Method 8270

Lab Report Number:

70861

Sample Date:

02/26/97 02/27/97

Received Date: Sample Site:

NAS Pensacola, FL

Job Order No.:

130 5002

### **Environmental Laboratory**

NAS Pensacola, FL 32508 - 6500

Bldg. 3887, Code 920

Client:

NPWC Environmental

Address: Bldg. 3887, Code 910

Phone (904) 452-4728/3642 DSN 922-4728/3642 NAS Pensacola,FL 32508 Phone #: 452-3180

Contact: 0

Greg Campbell

LAB Sample ID#	1-	70861				
Sample Name / Location		BF-1162				
		8-WM				
Collector's Name	РЈВ					
Date & Time Collected	02/26/97 @ 1550					
Sample Type (composite or grab)	Grab					
Analyst	M. Chambers					
Date of Extraction / Initials		03/04/97 MC				
Date of Analysis		03/04/97				
Sample Matrix		GW	·		***	
Dilution			×		1	
Compound				Det.		
Name	1-	70861	unils	Limit	Flags	
Ethylene Dibromide		BDL	ug/L	0.02		

#### SURROGATE SPIKE RECOVERIES

• • • • • • • • • • • • • • • • • • • •	· · · · · · · · · · · · · · · · · · ·		
	Acceptance		
	Limits	Percent Recovery	
Tetra-Chloro-m-Xylene	54-140	96	

COMMENTS :		
		_

BDL = Below Detection Limit.

ug/L = microgram per Liter, ug/Kg = microgram per Kilogram,

Approved by :

Jerry Dees, Laboratory Director

Date:

**Analytical Report** 

Lab Report Number:

Sample Date:

Sample Site:

Received Date:

Job Order No.:

Ethylene Dibromide by Method 504

70861

02/26/97

02/27/97

130 5002

NAS Pensacola, FL

3/12/97

Report Generated

# Environmental Laboratory

Bfdg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642 DSN 922-4728/3642

Client:

NPWC Environmental Address:

Bldg. 3887, Code 910 NAS Pensacola,FL 32508

Phone #:

452-3180

### **Analytical Report**

#### Petroleum Range Organics by FLPRO

Lab Report Number:

70861

Sample Date:

02/26/97

Received Date:

02/27/97

Sample Site: Jo

NAS Pensacola, FL

b Order No.: 130	5002
------------------	------

		Contact:	Greg C	Campbell	
LAB Sample ID#	1- 70861				
Sample Name / Location BF-1162			-		
		8-VVM			
Collector's Name		PJB			
Date & Time Collected		02/26/97 @ 1	550		
Sample Type (composite or grab)	Grab				
Analyst	J. Moore				
Date of extraction / Initials	03/06/97 JJ				
Date of Analysis	03/08/97				
Sample Matrix	GW				
Dilution			x	1	
				Det.	
Parameter	1-	7086	units	Limit	Flags
Petroleum Range Organics by FLPRO		BDL	mg/L	0.25	

#### SURROGATE SPIKE RECOVERIES

CONTROLLE OF THE THEORETHE					
	Acceptance				
	Limits	Percent Recovery			
ortho-Terphenyl	82-142 *	93			
Nonatriacontane (C-39)	42-193 *	139			

COMMENTS:	= Suggeste	ed surrogate recovery limits listed in the method. In-house laboratory limits are t	n the process of being determined.
BDL ≈ Below Detection	on Limit.	mg/L = millgram per Liter. mg/Kg = milligram per Kilogram.	
Approved t	by:	1 1111 1 1/11/	Date: 3/13/97
		Jerry Dees, Laboratory Director	

## **Environmental Laboratory**

Bldg. 3887, Code 920

NAS Pensacola, FL 32508 - 6500

Phone (904) 452-4728/3642 DSN 922-4728/3642

Client:

**NPWC Environmental** Address:

Bldg. 3887, Code 910 NAS Pensacola,FL 32508

Phone #: 452-3180

2011 022 11 20100 12	·	Contact:	Grea C	amnhell	
			Cicy C	ampbell	
LAB Sample ID#	1-	70862			
Sample Name / Location	В	F-1162			
	т	rip Blank			
Collector's Name	P	JB			
Date & Time Collected	0	2/26/97 @ AM			
Sample Type (composite or grab)	G	Grab			
Analyst	٠ ا	. Moore			
Date of Extraction / Initials	0	2/27/97 JM			
Date of Analysis	(	02/27/97			
Sample Matrix		)			
Dilution			X		
Compound				Det.	T
Name	1-	70862	units	Limit	Flags
Benzene	BDL		ug/L.	1	1
Bromodichloromethane	BDL		ug/L	1	1
Bromoform	BDL		ug/L	2	1
Bromomethane	BDL		ug/L	3	<del>                                     </del>
Carbon Tetrachloride	BDL		ug/L	1	<del>                                     </del>
Chlorobenzene	BDL		ug/L	1	1
Chloroethane	BDL		ug/L	1	1
2-Chloroethylvinyl ether	BDL		ug/L	1	1
Chloroform	BDL		ug/L	1	<del>                                     </del>
Chloromethane	BDL		ug/L	1	
Dibromochloromethane	BDL		ug/L	1	
1,2-Dichlorobenzene	BDL		ug/L	1	<del> </del>
1,3-Dichlorobenzene	BDL		ug/L	1	1
1,4-Dichlorobenzene	BDL		ug/L	1	1
Dichlorodlfluoromethane	BDL		ug/L	1	
1,1-Dichloroethane	BDL		ug/L	1	-
1,2-Dichloroethane	BDL		ug/L	1	
1,1-Dichloroethene	BDL		ug/L	1	
trans-1,2-Dichloroethene	BDL		ug/L	1	1
1,2-Dichloropropane	BDL		ug/L	1	1
cis-1,3-Dichloropropene	BDL		ug/L	1	
trans-1,3-Dichloropropene	BDL		ug/L	1	
Ethylbenzene	BDL		ug/L	1	
Methylene Chloride	BDL		ug/L	1	
Methyl-tert-butyl ether (MTBE) *	BDL		ug/l	1	
1,1,2,2-Tetrachloroethane	BDL		ug/L	1	
Tetrachloroethene	BDL		ug/L	1	
Toluene	BDL		ug/L	1	
1,1,1-Trichloroethane	BDL		ug/L	1	
1,1,2-Trichloroethane	BDL		ug/L	1	
Trichloroethene	BDL		ug/L	1	
Trichlorofluoromethane	BDL		ug/L	1	
Vinyl Chloride	BDL		ug/L	1	
Xylenes (Total)	BDL		ug/L	1	

#### SURROGATE SPIKE RECOVERIES

	Acceptance Llinits	Percent Recovery	
1,2-Dichloroethane-d4	75-133	102	
Toluene-d8	86-119	100	
Bromofluorobenzone	85-116	100	

COMMENTS :			
BDL = Below Detection Limit.	ug/L = microgram per Liter/ ug/Kg = microgram per Kilogram.	• = FL HRS certificatio	n pending.
Approved by :	(m) Cm	Date	3/12/97
	Jerry Dees, Laboratory Director	Page 1 of 1	Report Generated End of Report

## **Analytical Report**

#### 601/602 Volatiles by Method 8260

Lab Report Number:

70862

Sample Date:

02/26/97

130 5002

Received Date: Sample Site:

02/27/97 NAS Pensacola, FL

Job Order No.: